

The Phillip Merrill Environmental Center: Chesapeake Bay Foundation Headquarters Annapolis, Maryland



Owner:	Chesapeake Bay Foundation
Project Team:	Architect: SmithGroup, Inc. Engineer: SmithGroup, Inc. P.Manager: Synthesis, Inc. Contractor: Clark Construction Group Consultant: Janet Harrison, Architect
Building Statistics:	
Completion Date:	November, 2000
Cost:	\$6.36 M
Size:	30,600 gross square feet
Footprint:	12,000 square feet
Construction Type:	3B, Two Stories over Open Parking
Use Group:	Business(B), Assembly(A-3), Storage(S-2)
Lot Size:	33 acres
Annual Energy Use:	23 kBtu/sf/year
Occupancy:	90 Staff



LEED™ 1.0 Certification:
PLATINUM

Notes from the Project Team: *LEED™ was instrumental in conveying the importance of the sustainable elements of the design to CBF's Board of Trustees.*

☐ Sustainable Sites

- **Site Selection:** *Erected in Smart Growth Funding Area on footprint of existing structure. 26.6 acres remain undisturbed in Land Trust.*
- **Educational Model:** *Interpretive trails & demonstrations for public visitors*
- **Storm/Waste Water:** *All Composting Toilets & Bioretention/Wetland*
- **Resource Protection:** *Woodland, Wetland, & Tidal Water Restoration*

☐ Water Efficiency

- **Water:** *Rainwater Catchment & Reuse for Hand Washing & Irrigation*

☐ Energy and Atmosphere

- **Domestic Hot Water:** *Thermomax-Solar Technology*
- **Energy:** *Exceeds ASHRAE/IES Standard 90.1-1989 by 50%*
- **Envelope:** *Structural Insulated Panels (SIP) R-20 walls, R-30 roof*
- **HVAC:** *Natural Ventilation and Desiccant Dehumidification & Heat Recovery; heat pump system with geo-thermal heat exchanger*
- **Controls/Monitoring:** *Building Energy management System, "Green Light" notifies staff to open windows when outside conditions comply*
- **Renewable Energy:** *10.7% of energy needs met by photovoltaic panels, solar hot water heating*
- **Lighting:** *Daylight Harvesting and time clock lighting controls*

☐ Materials and Resources

- **Rapidly Renewable:** *Paralam Post, Beam, and Truss system, bamboo, cork and linoleum floorings*
- **Recycled Content:** *Metal roofing and siding, acoustic ceiling, ceramic tile, and MDF cabinetry*
- **Framing:** *Structural Insulated Panels (SIP) decrease wood use*

☐ Indoor Environmental Quality

- **Indoor Environmental Quality:** *CO₂ and VOC monitors.*
- **Furniture:** *Small, open offices allow for communal space. Systems furniture allows flexible layout to accommodate "churn"*